AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for imaging an optical code comprising the steps of:

consecutively imaging an optical code respectively using at least a first and a second imaging setting;

generating at least first and second sets of image data respectively corresponding to the consecutive imaging using the first and second imaging settings;

evaluating at least one of the first and second sets of image data;

selecting at least one of the first and second sets of image data in accordance with the evaluation; and

decoding image data from the selected set of image data that corresponds to the optical code.

2. (Original) The method according to Claim 1, wherein the step of consecutively imaging includes the step of imaging using the second imaging setting immediately after imaging using the first imaging setting.

3. (Original) The method according to Claim 1, further comprising the steps of:

evaluating a decodability quality of the first set of image data; and

configuring the second imaging setting according to the evaluation results.

4. (Original) The method according to Claim 1, wherein the first and second imaging settings each include at least one of a focus point setting, an illumination level setting, a signal gain setting, and an exposure setting.

5. (Original) The method according to Claim 1, wherein the evaluating step includes evaluating a decodability quality of at least one of the first and second sets of image data.

6. (Original) The method according to Claim 1, wherein the evaluation step includes evaluating a portion of the first set of image data and a portion of the second set of image data that is complementary to the portion of the first set of image data.

7. (Original) The method according to Claim 1, wherein the first imaging setting includes a first focal point setting, and the second imaging setting includes a second focal point setting, wherein the first and second focal point settings are different.

8. (Original) The method according to Claim 1, wherein the selecting step includes the steps of:

comparing evaluation results corresponding to the first and second sets of image data; and

selecting at least one of the first and second sets of image data in accordance with the comparison.

9. (Original) The method according to Claim 1, wherein:

the evaluating step includes evaluating only one set of image data and determining if results of the evaluation satisfy a predetermined condition;

the selecting step includes selecting the evaluated set of image data if the results of the evaluation satisfy the predetermined condition, and further comprising the steps of:

evaluating the other set of image data if the results of the evaluation do not satisfy the predetermined condition and comparing the evaluation results corresponding to the first and second sets of image data; and

selecting at least one of the first and second sets of image data in accordance with the comparison.

10. (cancelled)

11. (Original) The method according to Claim 1, wherein the evaluating step includes the steps of:

locating image data in at least one of the respective first and second sets of image data that corresponds to at least a portion of the optical code; and

evaluating the respective located data.

12. (Original) The method according to Claim 1, wherein a location of an optical code in the image data in one of the first and second sets of image data is used to locate image data that corresponds to at least a portion of the optical code in the other set of image data.

13. (Original) The method according to Claim 1, further comprising the step of receiving at least one of the first and second sets of image data while performing the evaluating step.

14. (currently amended) A system for imaging an optical code comprising:

means for consecutively imaging an optical code respectively using at least a first and a second imaging setting;

means for generating at least first and second sets of image data respectively corresponding to the consecutive imaging using the first and second imaging settings;

means for evaluating at least one of the first and second sets of image data;

means for selecting at least one of the first and second sets of image data in accordance with the evaluation; and

means for decoding image data from the selected set of image data that corresponds to the optical code.

15. (Original) The system according to Claim 14, wherein the means for consecutively imaging includes means for imaging using the second imaging setting immediately after imaging using the first imaging setting.

16. (Original) The system according to Claim 14, further comprising:

means for evaluating a decodability quality of the first set of image data; and

means for configuring the second imaging setting according to the evaluation results.

17. (Original) The system according to Claim 14, wherein the first and second imaging settings each include at least one of a focus point setting, an illumination level setting, a signal gain setting, and an exposure setting.

18. (Original) The system according to Claim 14, wherein the means for evaluating includes means for evaluating a decodability quality of at least one of the first and second sets of image data.

19. (Original) The system according to Claim 14, wherein the means for evaluation includes means for evaluating a portion of the first set of image data and a portion of the second set of image data that is complementary to the portion of the first set of image data.

20. (Original) The system according to Claim 14, wherein the first imaging setting includes a first focal point setting, and the second imaging setting includes a second focal point setting, wherein the first and second focal point settings are different.

21. (Original) The system according to Claim 14, wherein the means for selecting includes:

means for comparing evaluation results corresponding to the first and second sets of image data; and

means for selecting at least one of the first and second sets of image data in accordance with the comparison.

22. (Original) The system according to Claim 14, wherein the means for evaluating and the means for selecting collectively comprise at least one processor for performing the steps of:

evaluating only one set of image data and determining if results of the evaluation satisfy a predetermined condition;

selecting the evaluated set of image data if the results of the evaluation satisfy the predetermined condition;

evaluating the other set of image data if the results of the evaluation do not satisfy the predetermined condition and comparing the evaluation results corresponding to the first and second sets of image data; and

selecting one of the first and second sets of image data in accordance with the comparison.

23. (cancelled)

24. (Original) The system according to Claim 14, wherein the means for evaluating includes:

means for locating image data in at least one of the respective first and second sets of image data that corresponds to at least a portion of the optical code; and

means for evaluating the respective located data.

25. (Original) The system according to Claim 14, wherein a location of an optical code in the image data in one of the first and second sets of image data is used to locate image data that corresponds to at least a portion of the optical code in the other set of image data.

26. (Original) The system according to Claim 14, wherein the means for evaluating receives at least one of the first and second sets of image data is being received while the means for evaluating evaluates.

27. (currently amended) An optical code reading system comprising:

an imaging engine having a lens assembly and a photo sensor array for consecutively imaging an optical code located in a field of view of the imaging engine respectively using at least a first and a second imaging setting, and generating at least first and second sets of image data respectively corresponding to the consecutive imaging using the first and second imaging settings;

processing means for evaluating at least one of the first and second sets of image data, and selecting at least one of the first and second sets of image data in accordance with the evaluation; and

processing means for decoding image data from the selected set of image data that corresponds to the optical code.

28. (Original) The optical code reading system according to Claim 27, wherein the processing means further configures the second imaging setting in accordance with evaluation of the first set of image data.

29. (Original) The optical code reading system according to Claim 28, wherein the imaging engine further includes at least one of an illuminator assembly, a shutter assembly, signal processing circuitry, an illuminator control assembly for controlling the illuminator assembly, an exposure control assembly for controlling the shutter assembly, signal processing control circuitry for controlling the signal processing circuitry, and a focus control assembly for controlling the lens assembly; and

wherein the processing means generates control signals in accordance with the second image setting for controlling at least one of the illuminator control assembly, the exposure control assembly, the signal processing control circuitry, and the focus control assembly.

30. (Original) The optical code reading system according to Claim 27, wherein the processing means evaluates a portion of the first set of image data and a portion of the second set of image data that is complementary to the portion of the first set of image data.

31. (Cancelled)

32. (currently amended) A method for imaging an optical code comprising the steps of:

consecutively imaging said optical code respectively using at least a first and a second imaging setting;

generating at least first and second sets of image data respectively corresponding to the consecutive imaging using the first and second imaging settings; and

transmitting the first and second sets of image data to an external processor for processing of the image data, wherein the external processor processes the first and second sets of image data in accordance with a processing method comprising the steps of:

evaluating at least one of the first and second sets of image data;

selecting at least one of the first and second sets of image data in accordance with the evaluation; and

decoding image data from the selected set of image data that corresponds to the optical code.

33. (Original) A computer readable medium storing programmable instructions capable of being executed by a processor for performing the steps of:

receiving at least first and second sets of image data corresponding to consecutive imaging of an optical code using respective at least first and second image settings;

evaluating at least one of the first and second sets of image data;

selecting at least one of the first and second sets of image data in accordance with the evaluation; and

decoding image data from the selected set of image data that corresponds to the optical code.

34. (Original) A computer data signal embodied in a transmission medium for execution by at least one processor for processing an imaged optical code, the data signal comprising:

a code segment including instructions for receiving at least first and second sets of image data corresponding to consecutive imaging of an optical code using respective at least first and second image settings;

a code segment including instructions for evaluating at least one of the first and second sets of image data;

a code segment including instructions for selecting at least one of the first and second sets of image data in accordance with the evaluation; and

a code segment including instructions for decoding image data from the selected set of image data that corresponds to the optical code.